

Claims:

1. A process of producing a food product by heat-treating a food material containing reducing sugars, comprising the step of blanching the food material, wherein the blanching step comprises subjecting the food material to an active blanching medium under blanching conditions in a blanching section to produce spent blanching medium, withdrawing reducing sugars from the spent blanching medium to produce active blanching medium using a sugar-withdrawing means, and reusing the active blanching medium.
2. The process according to claim 1, wherein the reducing sugars are withdrawn from the spent blanching medium in a desugaring section which is separated from the blanching section, to which desugaring section a stream of spent blanching medium is conducted, and wherein a stream of active blanching medium is recycled to the blanching section.
3. The process according to claim 1 or 2, wherein the sugar-withdrawing means is one or more conversion agents capable of converting reducing sugars, wherein the conversion agents are selected from the group consisting of bacteria, yeasts, moulds and enzymes.
4. The process according to claim 3, wherein the conversion agent comprises one or more micro-organisms capable of converting glucose and/or fructose.
5. The process according to claim 3 or 4, wherein the micro-organisms are selected from the bacterial genera *Lactobacillus*, *Bacillus*, *Streptococcus*, *Oenococcus*, *Leuconostoc* and *Zymomonas*, yeast genera *Saccharomyces* and *Candida*, and fungal genera *Aspergillus* and *Rhizopus*.
6. The process according to claim 5, wherein the micro-organisms are selected from the species *Bacillus coagulans*, *Lactobacillus gasseri*, *Lactobacillus manihotivorans*, *Lactobacillus plantarum*, *Streptococcus thermophilus* and *Zymomonas mobilis*.

7. The process according to claim 3, wherein the conversion agent comprises one or more enzymes that are kept separated from the food material.
8. The process according to claim 7, wherein the enzyme is a glucose oxidase, a mannitol dehydrogenase or a glucose-fructose oxidoreductase, or a combination thereof.
9. The process according to claim 7 or 8, wherein the enzyme is present in the desugaring section in concentrations in the range of 10^2 to 10^5 , preferably of 10^3 to 5.10^3 enzyme units per gram glucose in the spent blanching medium.
10. The process according to claims 1 or 2, wherein the sugar-withdrawing agent is a sorbent capable of selectively adsorbing reducing sugars.
11. The process according to claim 10, wherein the sorbent is used in a chromatographic separation method such as a Simulated Moving Bed process (SMB) or an Improved Simulated Moving Bed process (ISMB).
12. The process according to any one of the preceding claims, wherein the reducing sugar content of the food material after blanching is less than 0.25 wt.%, preferably less than 0.1 wt.%, more preferably less than 0.05 wt.% of the blanched food material.
13. A process of producing a food product by heat-treating a food material containing reducing sugars, comprising the step of blanching the food material, wherein the blanching step comprises subjecting the food product to an active blanching medium under blanching conditions in a blanching section to produce spent blanching medium, withdrawing reducing sugars and/or asparagine from the spent blanching medium to produce active blanching medium using a desugaring and/or asparagine-withdrawing means, and reusing the active blanching medium.
14. The process according to claim 13, wherein the desugaring and/or asparagine-withdrawing means is an enzyme or a sorbent capable of selectively converting or adsorbing asparagine and/or reducing sugars.

15. The process according to any one of the preceding claims, wherein the reducing sugars are fructose and/or glucose.
16. The process according to any one of the preceding claims, wherein the food product is a potato product.
17. A fried, baked, roasted or grilled potato product having an acrylamide content lower than 150 µg per kg potato product.
18. The potato product according to claim 17, further comprising at least 3 g potassium and at least 3.5 g citric acid per kg product.
19. A blanched potato product comprising at least 3 g potassium and at least 3.5 g citric acid per kg product.
20. The blanched potato product according to claim 19, further comprising a reducing sugar content less than 0.25 wt.%, preferably less than 0.1 wt.%, more preferably less than 0.05 wt.% of the product.
21. The blanched potato product according to claim 19 or 20, further comprising at least 100 mg of an acid pyrophosphate per kg product.